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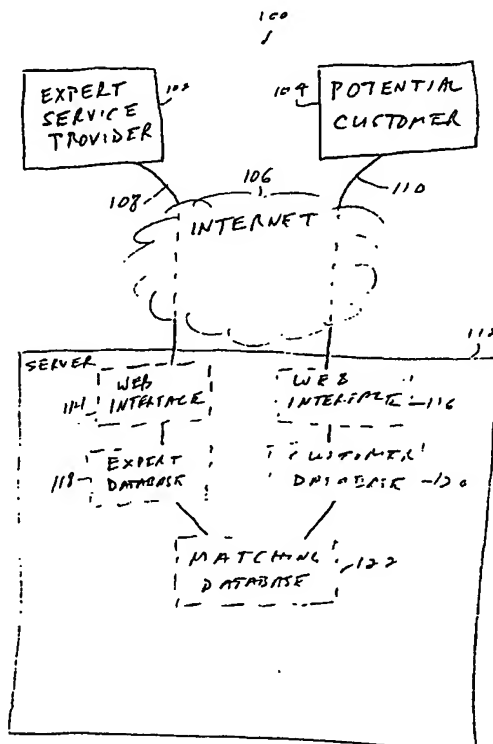
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(54) Title: INTERNET-BASED MATCHING SERVICE FOR EXPERT CONSULTANTS AND CUSTOMERS WITH MATCHING OF QUALIFICATIONS AND TIMES OF AVAILABILITY



(57) Abstract: An Internet server matches experts offering consulting services in the biological sciences or the like with potential customers of such consulting services. The server (112) presents each expert with a web interface (114, 116) through which the expert inputs (118, 120) his or her qualifications (122) and times of availability (402, 404, 406, 408). The qualifications are organized in a two-tier hierarchy of broad subject areas and sub-areas within each area. The times of availability (402, 404, 406, 408) are organized in terms of starting time of availability sought.

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1.

INTERNET-BASED MATCHING SERVICE FOR EXPERT CONSULTANTS AND  
CUSTOMERS WITH MATCHING OF QUALIFICATIONS AND TIMES OF  
AVAILABILITY

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10          Background of the Invention

The present invention is directed to a system and method for matching experts  
and expertise with persons requiring expert services and more particularly for a system  
and method for doing such matching by use of a database of experts' areas of expertise  
and times of availability.

15           The increasing complexity of product development and business building in the  
biosciences (biotech, pharmaceutical and medical device industry) requires more and  
more integration of specialized knowledge to achieve business goals. Overall R&D  
expenditures in the pharmaceutical, medical device and biotech industry in the US alone  
are more than \$ 50 billion annually, out of which about \$ 4-5 billion are currently being  
20          outsourced to outside vendors. The main outside service providers are clinical research  
organizations and specialized service providers in other aspects of product development  
and post-marketing activities. In addition, many individual consultants provide services  
to customers.

            The trend for outsourcing of product development and post-marketing activities  
25          in the bio-sciences is accelerating as companies try to concentrate more and more on core

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competencies and outsource other activities.

Product development (new drugs, medical devices and biologics) is an expensive and time-consuming business. It is heavily regulated by government authorities in virtually all countries in the world, with the European and US authorities setting the framework for data generation, scientific review and marketing authorization standards. Because of the similarities in product development and product maintenance, the underlying strategies for data generation and assembly of supportive dossiers for product approval purposes are virtually identical in nature in all industrialized countries of the world, specifically in the US, Canada, Australia, the European countries and Japan. Other Asian countries and countries in South America follow the lead of these countries.

The time to market – from product concept through marketing approval by a government agency – is critical to the overall return on investment for firms that develop new products. Typical product development cost range from \$50 million to \$ 300 million for pharmaceuticals and biotech products, and less for medical devices (depending on the use of the device), and development times range from 2 years to more than 10 years.

Any shortening of the time frame required to bring products to market will result not only in a competitive advantage (“first to market”), resulting in a larger market share than competitors that enter the market later, but also in an improved return on investment. Shortened development times will then translate into higher product profitability, earlier break even on the R&D investment, and a higher profitability of the enterprise with all its positive impact on earnings per share and subsequently share price.

This is certainly not a new insight, and companies have tried to address this issue by outsourcing more and more developmental activities (pre-clinical studies, clinical development) in an effort to tighten the developmental timelines and reduce cost for

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internal personnel needed for an efficient in-house development.

With the ever increasing number of service providers, customers (pharmaceutical, medical device and biotech firms) now have a choice among several service providers in the same service segment. However, the marketplace for services is very inefficient and relies heavily on conventional sales and business development activities on the part of service providers. That inefficiency contributes to a bloated cost structure of these service provider. That cost, of course, is ultimately borne by the corporate customer (the firm using service providers) and thus offsets somewhat the desired savings on the part of the customer. Even with high cash payments to purchase services, customers still have the hope of an improved product development and time to approval as compared to an in-house development.

However, in reality, comparisons between the cost-structure, corporate performance and track record, as well as available resources and their training standard, are not always made by the customer, mainly because the task of selecting a service provider is very complex and time consuming for internal personnel. This involvement of key personnel may in fact slow down other activities in product development so that the net effect of using outside service providers as far as time savings is concerned, may not be that significant as hope for by the customer.

Customers usually do not have access to broad comparisons of different service providers, including their strengths and weaknesses, unless they go through a usually time consuming selection and verification process. In addition, it is uncommon for customers to have an overview over pricing information for comparable services among service providers as well as information on available capacity of service providers at a given time. It may very well be that excess capacity of a certain service provider may result in

a price break for a customer, so that the service provider is able at least to sell the available capacity at a reduced rate rather than not sell it at all. Conversely, in times of full utilization of capacity in the service provider universe, capacity for certain services may be available only at a premium and may only be allocated to the party willing to pay that premium because internal time constraints require a tradeoff between more expenses today or a later product market introduction with delayed revenue stream in the future.

Solutions to some of the above problems have been sought on the Internet. In recent years, as the Internet and especially the World Wide Web have attracted the attention of commercial interests, many venues have been formed to match users with complementary goals. In Usenet newsgroups, and later on Web sites, people have offered or sought everything from antique fountain pens to love. Such matching has also extended to the matching of those offering expert skills with those requiring such skills. Two such systems are taught in U.S. Patent No. 5,862,223 to *Walker et al* and U.S. Patent No. 5,948,054 to *Nielsen*.

*Walker et al* teaches a system and method for matching experts with customers. A customer can log onto the system and successively choose a subject area (e.g., medicine), a subcategory (e.g., pediatrics), an expert level (e.g., a general practitioner), and an individual expert or experts. The experts' qualifications beyond the subject area, the subcategory, and the expert level are stored in an expert qualifications database, which can be in multimedia form (e.g., text, video, audio) and transmitted to customers; alternatively, the system can search the expert qualifications database through any of a variety of search protocols to weed out, e.g., mathematicians who have not published papers in number theory. The price and time frame can be included in the customer's question, but the time frame is limited to a "response time  $\leq$  2.0 hours" format. The

selected experts are notified and have the opportunity to submit bids. The expert's answer is routed through the system, which also handles payment. *Nielsen* teaches a matchmaking system in which customers having questions are matched with experts. However, the matching is done between a the customer's natural-language question and  
5 a natural-language statement of each expert's qualifications. Also, the times during which each expert will be available are not stored.

Summary of the Invention

In light of the above, it will be readily apparent that a need exists in the art for an efficient marketplace for expert services. It is therefore a primary object of the invention to provide a marketplace for expert services that allows experts and customers of expert  
5 services to find one another readily.

It is a further object of the invention to provide such a marketplace in which data are gathered on the experts' qualifications and stored in a readily searchable manner.

It is a still further object of the invention to provide such a marketplace in which both the experts' qualifications and their times of availability are stored, thereby  
10 providing an overview of available expertise and its availability over time.

To achieve the above and other objects, the present invention is directed to a technique for matching providers of expert services to customers needing such services. Both the providers and the customers subscribe to the service. The providers provide information on their qualifications to a database through a hierarchical menu system and  
15 also indicate the times during which they will be available. An employee of the company providing the matching calls the providers to verify the accuracy of the input data, which are then made available for searching. Thus, the database provides a profile of what resources are available and when they are available. The database can be used to provide an anonymous match between providers and customers. Once providers and customers  
20 are matched, a customer can decide to purchase the records relating to one or more providers. Upon payment, the record of the party able to provide services is released to the purchaser of that record. Before purchase, the experts and the customers are anonymous to one another. The technique can be implemented on the World Wide Web, on any other suitable Internet protocol, or on a communication system separate from the



Internet.

The utility of the present invention will be illustrated in the area of biosciences as an illustrative example. However, the present invention has utility in all scientific and other areas where knowledge is to be provided to customers who need knowledge services in research and development and in the commercialization of products and services.

**Brief Description of the Drawings**

A preferred embodiment of the present invention will be set forth in detail with reference to the drawings, in which:

- Fig. 1 shows an overview of a system implementing the preferred embodiment;
- 5 Fig. 2 shows a flow chart of operations for accessing the service;
- Fig. 3 shows a flow chart of operations for registering with the service;
- Figs. 4A-4D show a Web page for data in during registration;
- Figs. 5-7 show Web pages for inputting data about a user's qualifications;
- Fig. 8 shows periods of availability for three experts;
- 10 Figs. 9 and 10 show matching between an expert database and a customer database; and
- Fig. 11 shows a flow chart of operations for retrieving matches.

Detailed Description of the Preferred Embodiment

A preferred embodiment will now be set forth in detail with reference to the figures, in which like reference numerals refer to like elements throughout.

Fig. 1 shows an overview of the preferred embodiment, which is implemented on the Internet. A provider of expert services 102 and a potential customer of expert services 104 are connected to the Internet 106 through Internet connections 108, 110, which can be any type of Internet connection, from dial-up to high-speed optical connections. Of course, both the expert service provider 102 and the potential customer 104 can use any type of microcomputer or other device capable of accessing the Internet.

The expert 102 and the potential customer 104 are connected over the Internet 106 to a server 112 that determines whether they match. The expert 102 and the customer 104 are provided with a URL through which they log in and access an expert Web interface 114 and a customer Web interface 116 respectively. The Web interface 114 asks the expert 102 a series of questions to gather data on the expert 102 for an expert database 118, while the Web interface 116 asks the customer 104 a different series of questions to gather data on the customer 104 for a customer database 120. The matching between the expert database 118 and the customer database 120 results in a matching database 122 listing which experts are a match for which customers.

The Web interfaces, which will be described in greater detail below, can be implemented in any suitable manner, e.g., by CGI, while the databases, which will also be described in greater detail below, can be implemented in any suitable manner, e.g., by SQL. The server 112 can be any suitable Internet server capable of running such processes. The specific software and hardware requirements will be familiar to those skilled in the art.

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Fig. 2 shows a broad overview of the manner in which the expert 102 and the customer 104 interact with the system 100. In step 202, a user (either the expert 102 or the customer 104) goes to the server 112 in any suitable manner, e.g., by entering the URL manually into a Web browser, by following a link from another Web page maintained by the company operating the server 112, or by following a link from an off-site Web page. In step 204, server captures the access as a count with a date/time stamp and optionally with the user's IP address and other identifying information.

In step 206, the user selects one of three options: registration as a new expert, logging in as a registered user, and registration as a new customer. The new expert registers in step 208 and inputs the data for the expert database 118 in step 210. The registered user logs in with the already established user name and password in step 212 and sees matches from the matching database 122 in step 214. The new customer registers in step 216 and inputs the data for the customer database 120 in step 218.

Fig. 3 shows the steps involved in the registration 208. The user can register as an individual or as an organization; the substance of the registration procedure is the same for both options.

The registration begins in step 302. In step 304, a count is captured, as in step 204. In step 306, a welcome page is displayed. The welcome page can display a "continue" link to let the user go to the next page or can be configured with a meta tag to go to the next page automatically after a certain time. Either way, in step 308, the next page is displayed, which sets forth the ground rules for use of the service. The user is given the opportunity to accept or decline the ground rules. If it is determined in step 312 that the user has declined the ground rules, a page is displayed in step 314, having an error message explaining the need to accept the ground rules. In step 316, the user is

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given the option of returning to step 202 or exiting altogether.

If it is determined in step 312 that the user has accepted the ground rules, the user enters a name and a password in step 318. The system generates a new user I.D. and password and displays them to the user in step 320. The user inputs payment information in step 322, indicating the method of payment (typically a credit card) and the length of the subscription that the user is ordering (typically one month). In step 324, the user proceeds to step 210 of entering the data. Of course, a variety of registration techniques are known in the art and can be used.

Step 210 is carried out through the use of a succession of Web pages that prompt for and receive information. The information can be received through well known techniques such as CGI.

The collection of information starts with the collection of information on contact, billing, availability and education. The billing information can be used for extra-cost services not covered by the subscription or for any other billing purposes.

Such information is collected through the page 400 shown in Figs. 4A-4D. Of particular interest are the areas 402, 404, 406, and 408 in Fig. 4B, which collect information on times of availability. In the area 402, the user indicates whether he or she will be available for consulting immediately, in one week, in two weeks, in 2-4 weeks, or in 4-8 weeks, while the area 404 lets the user make the same choices for availability for a temporary job. In the area 406, the user can indicate availability for a permanent job. In the area 408, the user can indicate the length of time of availability for consulting, namely, one week, two weeks, 2-4 weeks, 4-8 weeks, "flexible," and "as the project requires." Thus, the areas 402 and 408 allow the user to indicate the start and stop dates for availability for consulting.

Information on the user's expertise is then collected. The various areas of expertise are organized in a two-tier hierarchy. That is, the user selects a broadly defined area of expertise and then selects one or more sub-areas within that area.

For selection of the broad area, the user is presented with the page 500 shown in Fig. 5. The page 500 includes a drop-down box 502 listing the various areas of expertise from which the user selects the primary area of expertise. As shown in Fig. 5, "Business development" is selected. Once the user selects an area, the user is presented with a page such as the page 600 shown in Fig. 6, in which the user selects one or more sub-areas within business development by checking check boxes 602. After selecting the sub-areas within the primary area, the user has the option of selecting secondary and tertiary areas of expertise through the page 700 shown in Fig. 7. Of course, for the secondary and tertiary areas, the user also selects sub-areas.

The result is the following data structure for the expert database 118. The fields include all of the options listed in the page 400, along with each area and all of its sub-areas. Each of the fields corresponding to a check box (e.g., a sub-area of expertise) or a radio box (e.g., time of availability) can have as its value a logical "true" or "false," while each of the fields corresponding to a text box (e.g., address) can have as its value a text string of up to a specified length. A staffer of the company operating the server 112 can telephone the user to verify the input information.

The longitudinal picture of availability can be visualized as shown in Fig. 8. Expert 1 has clicked "I am available for consulting in two weeks from now" in the area 402 and "I will be available for consulting for two weeks" in the area 408; thus, Expert 1's availability can be graphed as the bar 802. Expert 2 has clicked "I am available for consulting in one week from now" in the area 402 and "I will be available for consulting

for 2-4 weeks” in the area 408; thus, Expert 2’s availability can be graphed as the bar 804. Expert 3 has clicked “I am available for consulting in 4-8 weeks from now” in the area 402 and “I will be available for consulting for as long as the project requires” in the area 408; thus, Expert 3’s availability can be graphed as the bar 806. Of course, a chart  
5 like that of Fig. 8 does not have to be stored, as it can quickly be rederived from the logical “true” and “false” values stored in the database 118. The customer’s required times for availability can be visualized in the same manner and can be derived from the logical “true” and “false” values stored in the database 120.

The registration and data input steps 216 and 218, the Web pages associated  
10 therewith, and the resulting data structure for the customer database 120 are essentially the same as those just described, except that the customer, instead of inputting its own availability times and qualifications, inputs the availability times and qualifications required for the project at hand. Since the data fields used in the matching have logical “true” or “false” values, it is a simple matter to match records in the expert database 118  
15 with those in the customer database 120 to provide the matching database 122. The server 112 can be configured to search only for exact matches or for exact and approximate matches. If approximate or “soft” matches are allowed, they can be ranked by percentage, as known in the art of Internet search engines. If a customer 104 needs experts 102 in different areas or sub-areas of expertise, e.g., for different projects, the  
20 customer 104 can go through the data collection process multiple times, thereby submitting multiple service requests.

The matching process will be explained with reference to Figs. 9 and 10. In these figures, logical “true” and “false” values are shown as ones and zeroes, respectively.

Fig. 9 shows matching for the start times for availability. The expert has

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indicated availability for 2-4 weeks; therefore, the database 118 stores a one in that field and zeroes in the other "I am available for consulting for ..." fields. The customer wants an expert for an assignment that will probably require 2-4 weeks; therefore, the database 120 stores a one in that field and zeroes in the other "the assignment will probably require ...

5 ..." fields. The ones and zeroes are compared, and in this case, a match is found. If the expert had indicated availability for one week, and the customer had sought an expert for 4-8 weeks, the two would not be matched.

Fig. 10 shows matching for expertise. The database 118 stores the information that the expert has indicated expertise in the areas of business development, data

10 management, and good manufacturing practice, and within the area of business development, the sub-areas of integrated due-diligence assessments, business opportunity identification, business strategy, and portfolio and product analysis. The database 120 stores the information that the customer wants an expert in business development and more specifically in integrated due-diligence assessments. In this case, there is a match.

15 If the customer had wanted an expert in financial modeling, the two would not be matched.

The matching of the databases 118 and 120 to produce the database 122 can take place periodically or at least independently of times at which either the experts 102 or the customers 104 log on. One advantage of doing so is that both experts 102 and customers

20 104 can be notified of matches as soon as they log on, rather than having to log on and then run a matching process. Another advantage is the ability to take advantage of slow times when few users are logged on.

Step 214 of seeing the matches will now be explained with reference to Fig. 11. Once the user has logged into the server in step 212, the user is acknowledged by name



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in step 1102. In step 1104, it is determined whether there are any matches. If not, the user is prompted in step 1106 to change the matching parameters (e.g., by resubmitting data) or to exit and return later, when there may be matches. Any resubmitted data are stored in the customer database 120. If the user has multiple service requests, the user  
5 can be prompted in step 1106 to change the matching parameters in other service requests.

Once the user has matches, the user can purchase one or more of the records, using the payment information stored in the database 118 or 120 or other payment information. Until now, the experts and the customers have been anonymous to each  
10 other. Once a record is purchased, the contact information in that record is made available. The expert can then contact the customer, or vice versa. Other information besides contact information can be held in confidence until purchase.

In step 1108, the user is prompted to view either new matches or previously purchased matches, which can be selected by date ranges. If the user chooses to view  
15 new matches, the user is given an opportunity in step 1110 to select the matches to view and to purchase them. Once the user selects matches to purchase, the system processes the purchase on a secure server in a manner known in the online retailing art. The matches, once purchased, become available for viewing. If the user chooses to view previously purchased matches, the system allows the user to do so in step 1112. Each  
20 previously purchased match can be shown with the date of purchase and the payment information.

Whether the user wishes to view new or previously purchased matches, the user is given a choice in step 1114 to receive the records by e-mail in step 1116 or to view the records on screen in step 1118. The user can then handle the records in a suitable

manner, e.g., by printing them in step 1120, using the print command of the e-mail client or Web browser.

While a preferred embodiment has been set forth in detail above, those skilled in the art will readily appreciate that many other embodiments can be realized within the scope of the invention. For example, the invention is not limited to experts in the biological sciences, but can be extended to other areas of expertise, such as computer consulting. For that matter, the invention need not be limited to expert services at all, but can be used for any type of matching of a first party to a second party in which it is desired to develop a longitudinal picture of availability. Moreover, while the invention has been disclosed as implemented on the World Wide Web, any other suitable communication technology can be used instead. Therefore, the present invention should be construed as limited only by the appended claims.

What is claimed is:

1. A method of matching a first party to a second party, the method comprising:
  - (a) collecting information concerning the first party, the information comprising attributes of the first party and an indication of at least one time period of availability of  
5 the first party;
  - (b) entering the information collected in step (a) into a first database;
  - (c) collecting information concerning the second party, the information comprising attributes sought by the second party and an indication of at least one time period of availability sought by the second party;
  - 10 (d) entering the information collected in step (c) into a second database;
  - (e) matching the first database and the second database to form a matching database;
  - (f) using the matching database to match the first party to the second party to form a match; and
  - 15 (g) informing at least one of the first party and the second party of the match.
2. The method of claim 1, wherein the attributes of the first party comprise qualifications of the first party, the qualifications being classified into a plurality of areas and, within each of the plurality of areas, a plurality of sub-areas.
3. The method of claim 2, wherein the attributes sought by the second party  
20 comprise qualifications sought by the second party, the qualifications being classified into the same areas and sub-areas into which the qualifications of the first party are classified.
4. The method of claim 3, wherein, in each of the first database and the second database, each of the plurality of sub-areas within each of the plurality of areas

corresponds to a field whose value is one of a logical “true” or a logical “false.”

5. The method of claim 1, wherein each of steps (a), (c), and (g) is performed over the Internet.

6. The method of claim 5, wherein:

5 a server is provided, the server being connected to the Internet to communicate over the Internet with both the first party and the second party; and steps (b) and (d)-(f) are performed on the server.

7. The method of claim 6, wherein step (f) is performed at times independent of times at which either the first party or the second party is in communication with the  
10 server.

8. The method of claim 7, wherein step (f) is performed periodically.

9. The method of claim 1, wherein, in each of the first database and the second database, the at least one time period of availability is indicated by beginning and ending times.

10. The method of claim 9, wherein each of the beginning and ending times is selected from a plurality of options.

11. The method of claim 10, wherein, in each of the first database and the second database, each of the plurality of options for each of the beginning and ending times corresponds to a field whose value is one of a logical “true” and a logical “false.”

20 12. The method of claim 1, wherein step (g) comprises:

- (i) providing a notification of an existence of the match;
- (ii) collecting payment for details of the match; and
- (iii) providing the details of the match.

13. The method of claim 12, wherein:

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the information collected from the first party further comprises confidential information about the first party;

the information collected from the second party further comprises confidential information about the second party; and

5           none of the confidential information about the first party or the second party is released to the second party or the first party, respectively, until after the payment has been received.

14. A system for matching a first party to a second party, the system comprising:  
communication means for (i) collecting information concerning the first party, the  
10 information comprising attributes of the first party and an indication of at least one time period of availability of the first party, and for (ii) collecting information concerning the second party, the information comprising attributes sought by the second party and an indication of at least one time period of availability sought by the second party; and

database means for (i) entering the information concerning the first party into a  
15 first database, (ii) entering the information concerning the second party into a second database, (iii) matching the first database and the second database to form a matching database, (iv) using the matching database to match the first party to the second party to form a match, and (v) informing at least one of the first party and the second party of the match through the communication means.

20           15. The system of claim 14, wherein the attributes of the first party comprise qualifications of the first party, the qualifications being classified into a plurality of areas and, within each of the plurality of areas, a plurality of sub-areas.

16. The system of claim 15, wherein the attributes sought by the second party comprise qualifications sought by the second party, the qualifications being classified

into the same areas and sub-areas into which the qualifications of the first party are classified.

17. The system of claim 16, wherein, in each of the first database and the second database, each of the plurality of sub-areas within each of the plurality of areas  
5 corresponds to a field whose value is one of a logical "true" or a logical "false."

18. The system of claim 14, wherein the communication means comprises means for communicating with the first party and the second party over the Internet.

19. The system of claim 18, wherein the database means forms the match at times independent of times at which either the first party or the second party is in  
10 communication with the communication means.

20. The system of claim 19, wherein the database means forms the match periodically.

21. The system of claim 14, wherein, in each of the first database and the second database, the at least one time period of availability is indicated by beginning and ending  
15 times.

22. The system of claim 21, wherein each of the beginning and ending times is selected from a plurality of options.

23. The system of claim 22, wherein, in each of the first database and the second database, each of the plurality of options for each of the beginning and ending times  
20 corresponds to a field whose value is one of a logical "true" and a logical "false."

24. The system of claim 14, wherein at least one of the first party and the second party is informed of the match by (i) providing a notification of an existence of the match, (ii) collecting payment for details of the match, and (iii) providing the details of the match.

25. The system of claim 24, wherein:

the information collected from the first party further comprises confidential information about the first party;

the information collected from the second party further comprises confidential information about the second party; and

none of the confidential information about the first party or the second party is released to the second party or the first party, respectively, until after the payment has been received.

26. A method of forming a marketplace for knowledge services in which a first party able to provide the knowledge services is matched to a second party wishing to obtain the knowledge services, the method comprising:

(a) collecting information concerning the first party, the information comprising an indication of expertise of the first party in the knowledge services and an indication of the first party's availability over time;

(b) entering the information collected in step (a) into a first database to form an overview of available expertise in the knowledge services and an availability of the available expertise over time;

(c) collecting information concerning the second party, the information comprising an indication of expertise sought by the second party in the knowledge services and an indication of an availability over time sought by the second party;

(d) entering the information collected in step (c) into a second database;

(e) matching the first database and the second database to form a matching database;

(f) using the matching database to match the first party to the second party to form

22.

a match; and

(g) informing at least one of the first party and the second party of the match.

27. A system for forming a marketplace for knowledge services in which a first party able to provide the knowledge services is matched to a second party wishing to obtain the knowledge services, the system comprising:

communication means for (i) collecting information concerning the first party, the information comprising an indication of expertise of the first party in the knowledge services and an indication of the first party's availability over time, and for (ii) collecting information concerning the second party, the information comprising an indication of expertise sought by the second party in the knowledge services and an indication of an availability over time sought by the second party; and

database means for (i) entering the information concerning the first party into a first database to form an overview of available expertise in the knowledge services and an availability of the available expertise over time, (ii) entering the information concerning the second party into a second database, (iii) matching the first database and the second database to form a matching database, (iv) using the matching database to match the first party to the second party to form a match, and (v) informing at least one of the first party and the second party of the match through the communication means.



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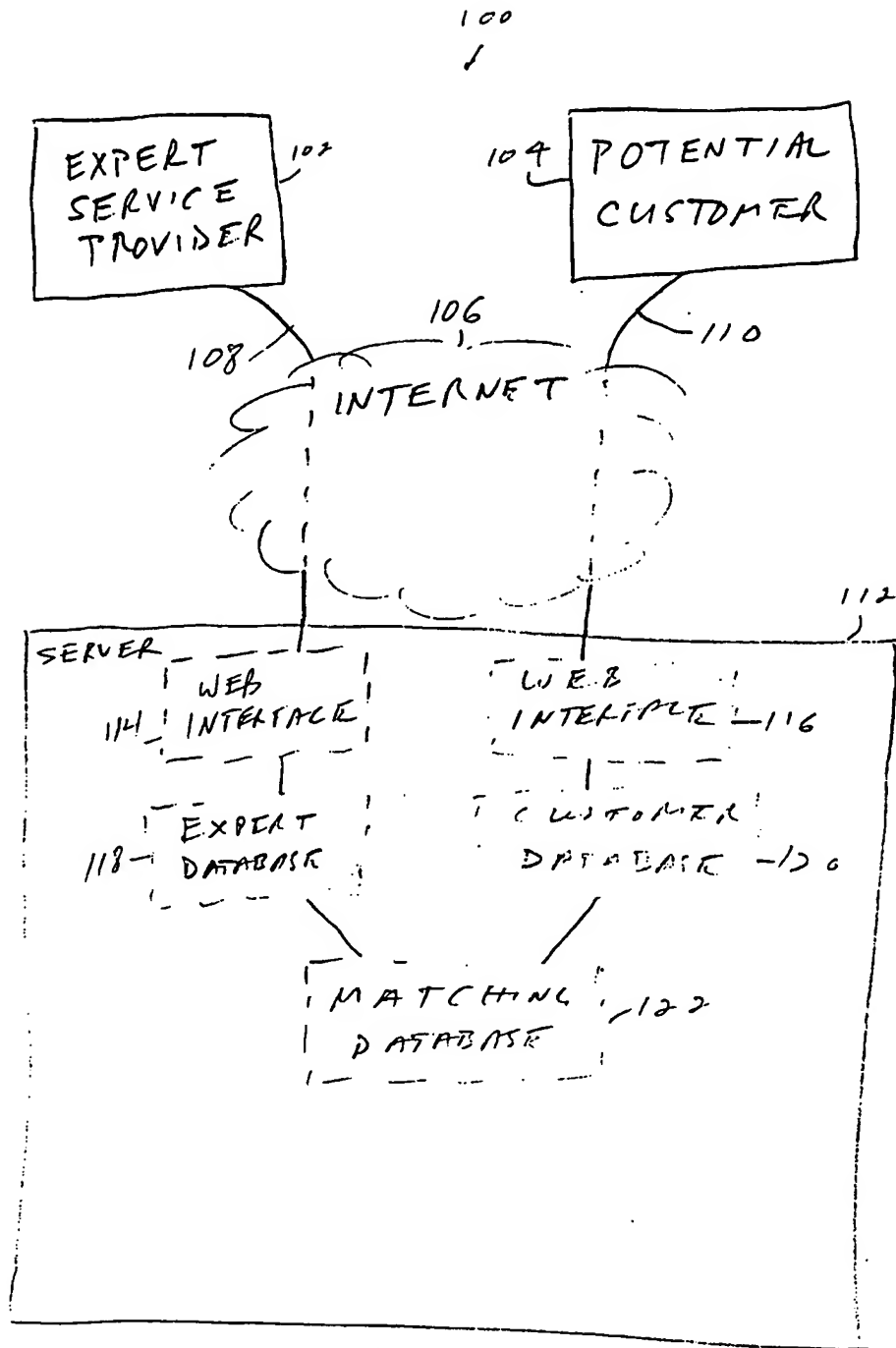


Fig. 1

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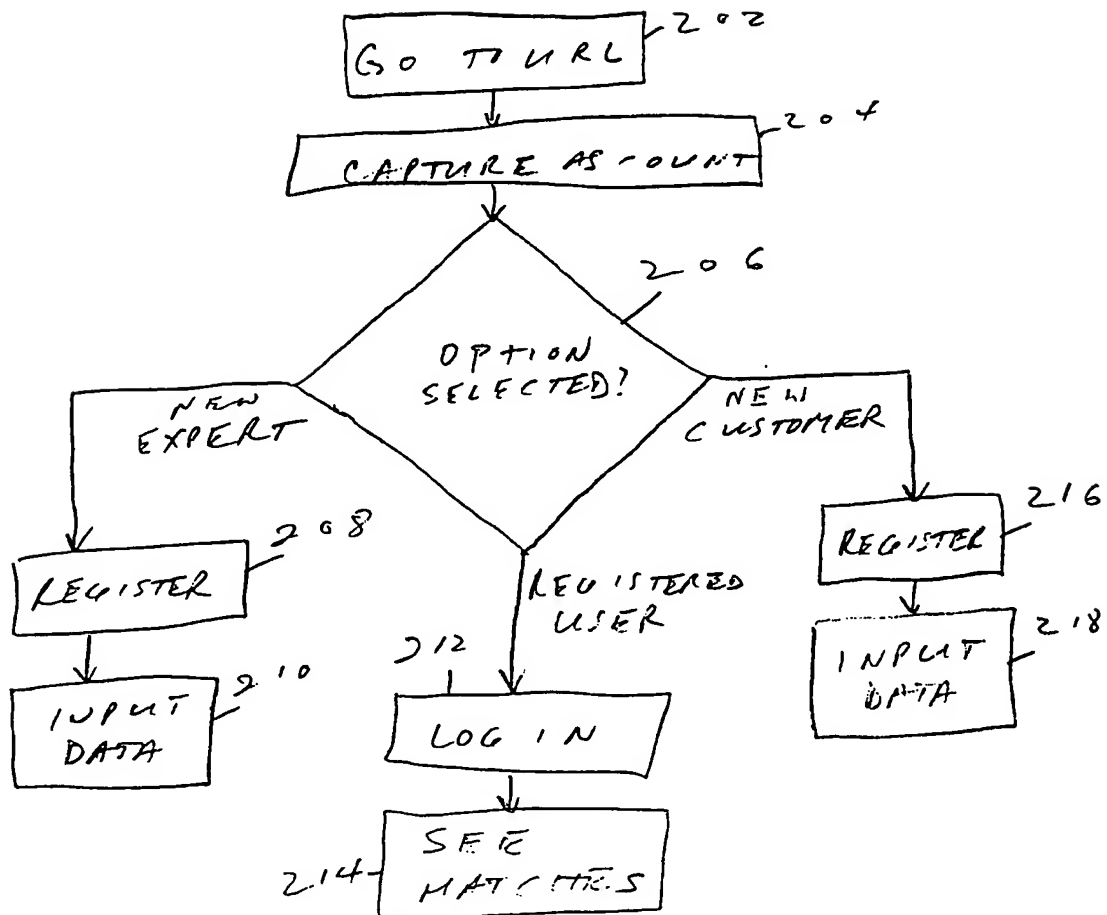


Fig-2

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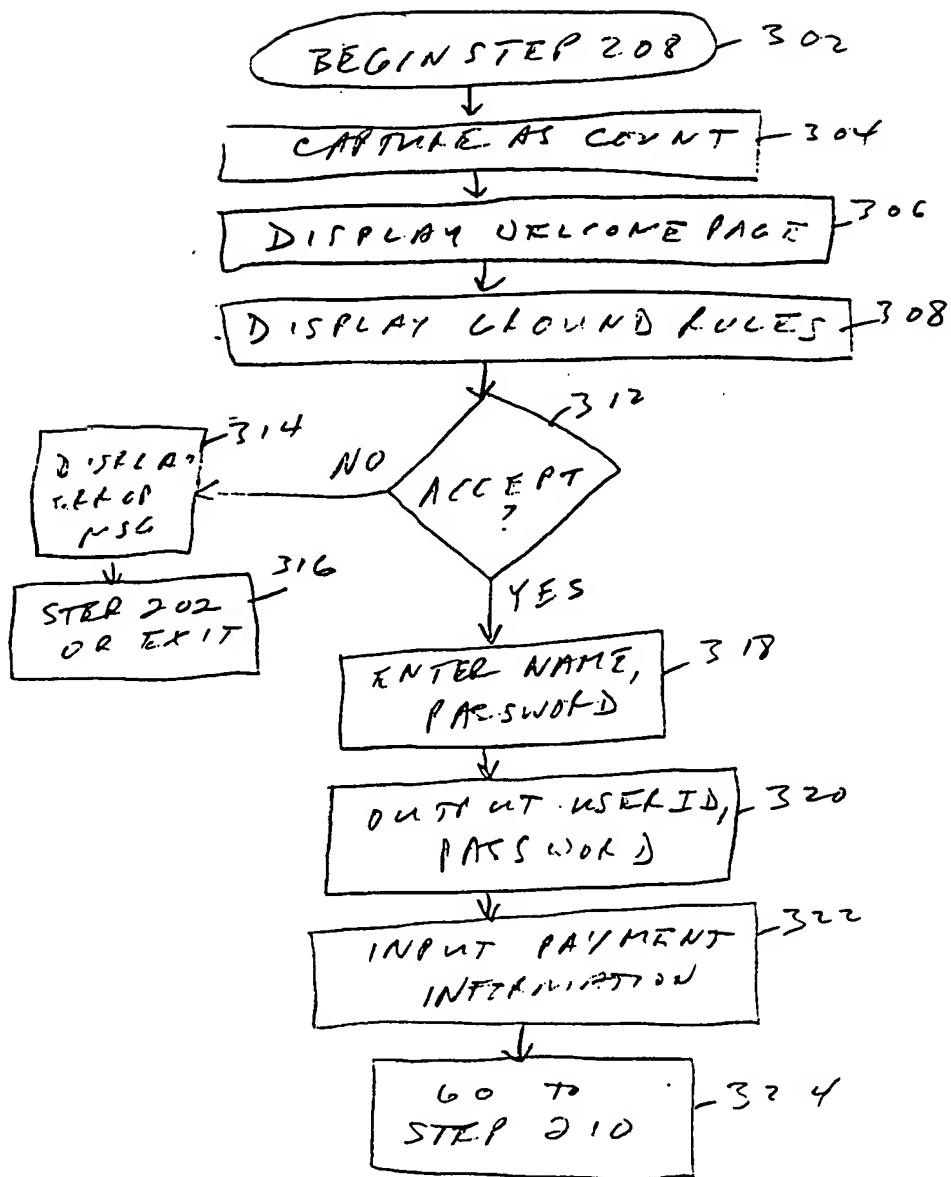


Fig. 3

## individual consultant registration

## [FrontPage Save Results Component]

Please provide the following contact information (my address will be kept confidential by biothink):

First name   
Last name   
Middle initial   
Organization   
Street address   
Address (cont.)   
City   
State/Province   
Zip/Postal code   
Country   
Work Phone   
FAX   
E-mail   
URL

## BILLING

Credit card  ☐  
Cardholder name   
Card number   
Expiration date

I would like to be contacted by:

- ☐ e-mail (primary way of communication)  
☐ phone      The best time to call is  hh:mm:ss am/pm  
☐ fax

Time zone:

☐

Fig.  
4A

**Personal Information****I am interested in:**

- ☐ consulting opportunities in my area of expertise
- ☐ learning more about permanent job opportunities
- ☐ learning more about temporary job opportunities
- ☐ serving as a medical expert for industry or others

**I am available for consulting:**

- ☐ immediately
- ☐ in 1 week from now
- ☐ in 2 weeks from now
- ☐ in 2-4 weeks from now
- ☐ in 4-8 weeks from now

**I am available for a temporary job:**

- ☐ immediately
- ☐ in 1 week from now
- ☐ in 2 weeks from now
- ☐ in 2-4 weeks from now
- ☐ in 4-8 weeks from now

**I am available for a permanent job:**

- ☐ Short term (0-3 months)
- ☐ Maybe later (3-6 months)
- ☐ Maybe later (6-12 months)
- ☐ Keep me posted about opportunities

**Length of availability – I will be available for consulting for:**

- ☐ 1 week
- ☐ 2 weeks
- ☐ 2-4 weeks
- ☐ 4-8 weeks
- ☐ flexible
- ☐ as the project requires

**I have the following geographic preferences for working with clients:**400  
(cont'd)

402

404

406

Fis.  
4B

408

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<input type="checkbox"/> New York Metro	<input type="checkbox"/> San Francisco(Bay Area)	<input type="checkbox"/> Washington DC Metro	<input type="checkbox"/> Boston Metro
<input type="checkbox"/> New Jersey	<input type="checkbox"/> Pennsylvania	<input type="checkbox"/> Chicago Metro	<input type="checkbox"/> NW
<input type="checkbox"/> NE	<input type="checkbox"/> SW	<input type="checkbox"/> SE	<input type="checkbox"/> Southern California
<input type="checkbox"/> anywhere in the US	<input type="checkbox"/> Europe	<input type="checkbox"/> Asia Pacific	<input type="checkbox"/> Americas

400  
(cont'd)**Your education / certification (check all that apply):**

<input type="checkbox"/> MD	<input type="checkbox"/> LPN
<input type="checkbox"/> PhD	<input type="checkbox"/> BS
<input type="checkbox"/> RPh	<input type="checkbox"/> RAC
<input type="checkbox"/> RN	<input type="checkbox"/> MBA

**Other degree or certification:****Industry experience:**

- ☐ <2 years  
☐ 2 - 5 years  
☐ > 5 years

**Memberships:**

- ☐ AMA  
☐ AMWA  
☐ DIA  
☐ FDLI  
☐ RAPS  
☐ Other

**Number of professional presentations/classes you've taught or organized:**

- ☐ none  
☐ <5  
☐ > 5

**Number of publications you've authored or co-authored:**Fig.  
40

☐ none  
☐ <5  
☐ <10  
☐ <20  
☐ >20

☐ ☐

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Last revised: August 27, 1999

Fig. 4D

400 (amended)

individual expert questionnaire

Your expertise is focused in:

☐ ☐

502

500

Fig. 5

600

**individual expert registration**

---

**Your expertise:**

**Business Development**

602 ☐ Integrated Due Diligence assessments

☐ Business opportunity identification

☐ Business strategy

☐ In-licensing

☐ Out-licensing


☐ Portfolio and Product analysis

☐ Licensing negotiations

☐ Product acquisitions

☐ Mergers and acquisitions

☐ Financial modeling



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Fig. 6

700

**individual expert questionnaire**

Thank you very much for registering with BioThink regarding your primary area of expertise.

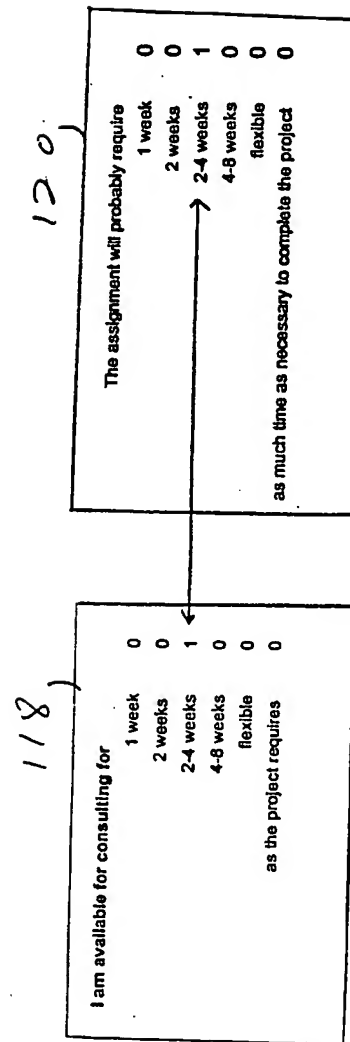
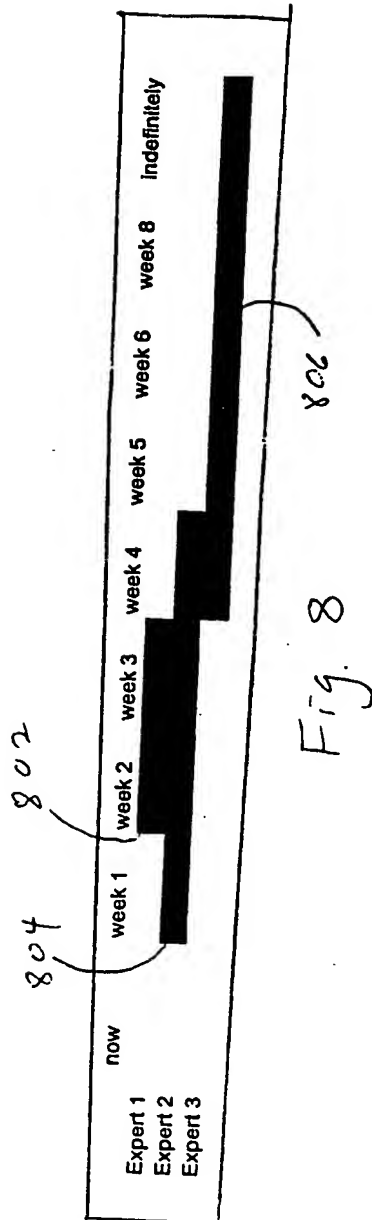
If you have a secondary or tertiary area of expertise, please select it below and answer the questions.

☐ Business development 

Otherwise, please [click here](#) to return to the main BioThink page for more news about the allied disciplines of biotechnology, medical devices and pharmacology.

Fig. 7





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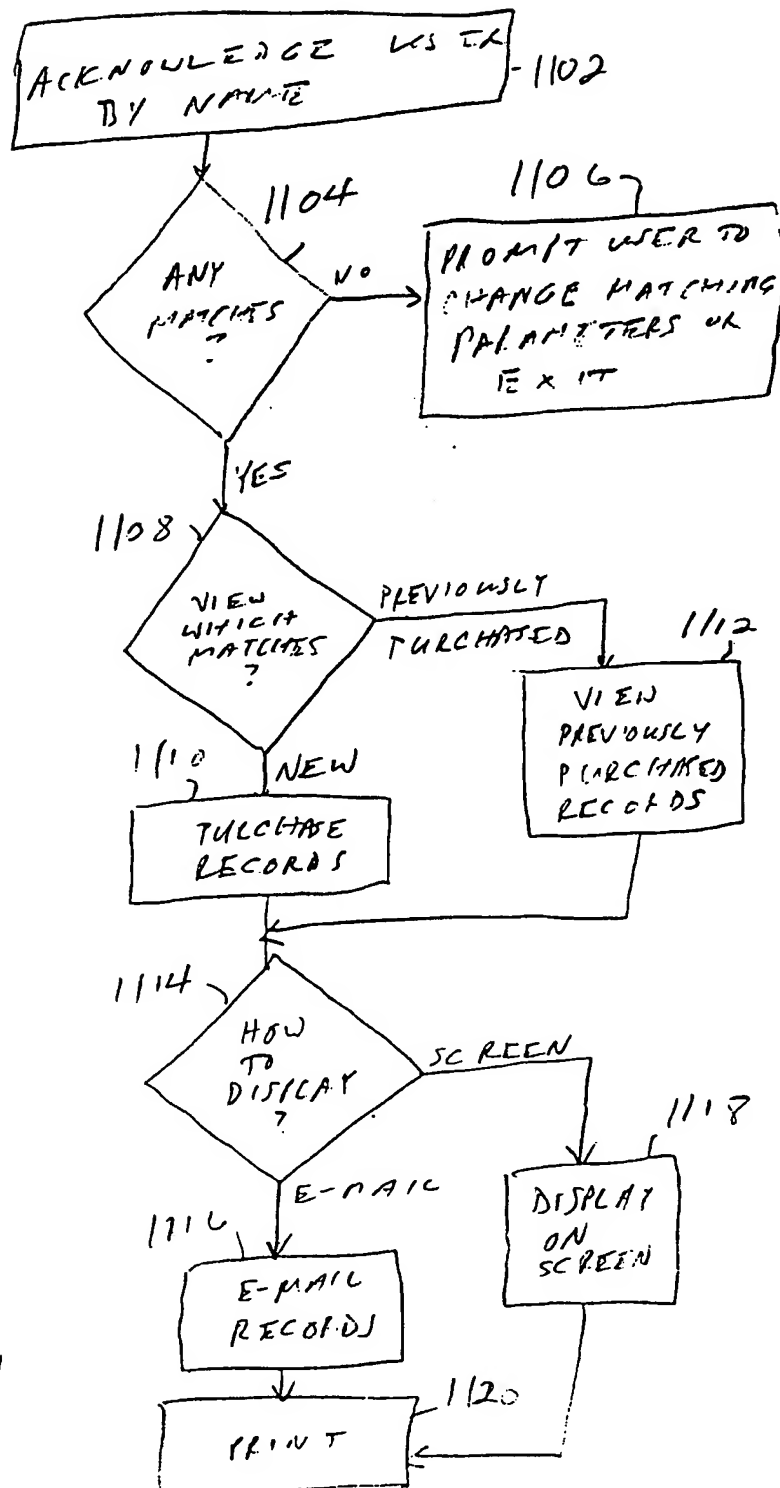


Fig. 11

118

120

<p><b>Your expertise is focussed in</b></p> <p><b>Business development</b> 1</p> <p>Clinical Research: Clinical Study Monitoring (CRA) 0</p> <p>Clinical Research: Medical Monitor 0</p> <p>Clinical Research: Project Management 0</p> <p>Data Management 1</p> <p>Good Manufacturing Practice 1</p> <p>Marketing consulting 0</p> <p>Medical Information 0</p> <p>Medical Writing 0</p> <p>Pre-clinical research 0</p> <p>Public relations 0</p> <p>Product Safety 0</p> <p>Regulatory consulting 0</p> <p>Statistics 0</p> <p>Medical Expert 0</p> <p>Toxicology and pharmacology research 0</p> <p>Financing and M&amp;A expertise 0</p> <p>Legal expertise 0</p> <p>Recruiter 0</p>	<p><b>We need experts (consultants) or job applicants with experience in</b></p> <p><b>Business development</b> 1</p> <p>Clinical Research: Clinical Study Monitoring (CRA) 0</p> <p>Clinical Research: Medical Monitor 0</p> <p>Clinical Research: Project Management 0</p> <p>Data Management 0</p> <p>Good Manufacturing Practice 0</p> <p>Marketing consulting 0</p> <p>Medical Information 0</p> <p>Medical Writing 0</p> <p>Pre-clinical research 0</p> <p>Public relations 0</p> <p>Product Safety 0</p> <p>Regulatory consulting 0</p> <p>Statistics 0</p> <p>Medical Expert 0</p> <p>Toxicology and pharmacology research 0</p> <p>Financing and M&amp;A expertise 0</p> <p>Legal expertise 0</p> <p>Recruiter 0</p>
<p><b>Your expertise</b></p> <p><b>Business Development</b></p> <p>Integrated due-diligence assessments 1</p> <p>Business opportunity identification 1</p> <p>Business strategy 1</p> <p>In-licensing 0</p> <p>Out-licensing 0</p> <p>Portfolio &amp; Product analysis 1</p> <p>Licensing negotiations 0</p> <p>Product acquisitions 0</p> <p>Mergers and acquisitions 0</p> <p>Financial modelling 0</p>	<p><b>We need the following experience in experts and candidates</b></p> <p><b>Business Development</b></p> <p>Integrated due-diligence assessments 1</p> <p>Business opportunity identification 0</p> <p>Business strategy 0</p> <p>In-licensing 0</p> <p>Out-licensing 0</p> <p>Portfolio &amp; Product analysis 0</p> <p>Licensing negotiations 0</p> <p>Product acquisitions 0</p> <p>Mergers and acquisitions 0</p> <p>Financial modelling 0</p>

Fig. 10

## INTERNATIONAL SEARCH REPORT

International application No  
PCT/US00/28325

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/30

US CL : 707202, 201, 395/204

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 707202, 201, 395/204

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CAS ONLINE, DIALOG, WEST/EAST

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,862,325 A (REED et al) 19 January 1999, see entire document.	1-27
Y	US 5,704,044 A (TARTER et al) 30 December 1997, see entire document.	1-27
Y	US 5,787,443 A (PALMER) 28 July 1998, see entire document.	1-27
Y,P	US 5,970,502 A (SALKEWICZ et al) 19 October 1999, see entire document.	1-27



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*A* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

17 NOVEMBER 2000

Date of mailing of the international search report

04 JAN 2001

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Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

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